UNITED STATES PATENT AND TRADEMARK OFFICE

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10/612,025	07/02/2003	Kevin T. Chan	14885US01	5831

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 September 2007*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   **Claims 1-30** rejected under 35 U.S.C. 102(b) as being anticipated by Bontemps et al. (US

Patent Number 5,923,663)

Regarding **claim 1, 11, and 21** Bontemps et al. discloses a method for providing and

configuring secure communication links, the method comprising:

determining any one usable media pair from all existing media pairs(Ethernet 100Base-

T4) of a first device(see, figure 3, see col 12, lines 35-38, the Ethernet 100base-t4

configuration, of a automatic media detection circuit(see col. 3, lines 44-46, established a

working communication link) working communication link reads on usable media pair) ;

selecting any one channel (see figure 3, contact pairs 314 to contact pairs 312, signal

pairs 322a-d) from all existing channels(see figure 3, different channels from 314 to 312), said

selected any one channel being different from a general channel assignment corresponding to

said determined any one usable media pair (see col. 12-13, lines 58-7, the select logic(reads on

channel assignment), select and connect the contact pairs); and

assigning said selected any one channel to said any one media pair (see col. 13, lines 30-

36, the logic state machine(figure 4), is provided for each of the ports , a link detect signal

asserts a xover _selx signal, which reads on the when the channels are assigned to the media pair, (working communication link)).

Regarding **Claims 2, 12 and 22**, Bontemps et al. discloses everything as claimed above (see claims 1, 11 and 21).

notifying a second device(DFF, figure 4) of said assigned any one channel which corresponds to said any one media pair (see figure 4, section DFF(D-type flip-flop),see col. 13-14, lines 60-2, the DFF asserts the Xover_sel1 signal at its output, it receives the assignment signal xover_sel)

Regarding **Claims 3, 13 and 23**, Bontemps et al. discloses everything as claimed above (see claims 2, 12 and 22).

cross-connecting a corresponding channel and media pair for said second device, said cross-connected channel and media pair being equivalent to said selected any one channel assigned to said any one media pair (see col. 13, lines 9-28, table of crossover configurations) .

Regarding **Claims 4, 14, and 24**, Bontemps et al. discloses everything as claimed above (see claims 1, 11, and 21).

negotiating said assignment of said selected any one channel to said any one media pair (see col. 14, lines 46-53, the DFF is in toggle mode, toggling (reads on negotiating) the xover_sel1 signals)

Regarding **Claims 5, 15, and 25**, Bontemps et al. discloses everything as claimed above (see claims 1, 11, and 21).

selecting from a plurality of predetermined channel and media pair assignments, a particular one of said channel and media pair assignment *(see col. 14, lines 46-53, the link_detect1 signal is asserted, which detects a valid communication link, selected)*

Regarding **Claims 6, 16, and 26**, Bontemps et al. discloses everything as claimed above (see claims 1, 11, and 21).

designating a first combination of said channel assigned to said any one media pair as a communication channel and media pair (see col. 13, 9-29, channel assignments, as shown in table 6, see figure 3 and 4, see col. 12, lines 56-67, the select logic select the first and second contacts , designating a channel assignment); and

designating a second combination of said channel assigned to said any one media pair as a control channel (figure 4, DFF) and media pair (port1-n, connected to media pair)(see col. 13, lines 25-29, the QS3390 quick switch is used to implement the select logic(to complete the straight through and crossover connections), see also col. 13-14, lines 67-5, the DFF within all the ports1-n assure all the muxes of the select logic are in the same phase (which reads on the DFF is the control channel of the select logic, controlling the straight through and crossover connection) .

Regarding **Claims 7, 17 and 27**, Bontemps et al. discloses everything as claimed above (see claims 6, 16 and 26).

securely (reads on working) transferring communication traffic via said communication

channel and media pair(see col. 15, lines 20-24, the automatic media detection circuit,

establishes a working communication link)

Regarding **Claims 8, 18, and 28,** Bontemps et al. discloses everything as claimed above

(see claims 7, 17, and 27).

securely transferring control information via at least one of said communication channel

and media pair (see col. 13, lines 29-45, control information is XOVER_SELx and

LINK_DETECTx signals)

Regarding **Claims 9, 19 and 29,** Bontemps et al. discloses everything as claimed above

(see claims 8, 18, and 28).

monitoring at least one of said communication channel and media pair by a second

device(see col. 14, lines 46-54, Phy device knows (which reads on monitoring) when

communication signals are lost) ; and

determining said selected any one channel assigned to said any one media pair*(see col 4,*

lines 46-54, when communication signals are lost, DFF toggles until link is detected,)

Regarding **Claims 10, 20 and 30**, Bontemps et al. discloses everything as claimed above

(see claims 9, 19, and 29).

said control information is at least one of authentication information, encryption

information, channel setup information and link provisioning and link maintenance information(

see col. 29-36, the control information LINK_DETECTx and XOVER_SELx, provide channel

setup and link information).

With respect to **claims 21-30**, it is noted that the language used by Applicant merely

suggests or makes optional those features described as "adapted to"; such language does not

require steps to be performed nor limits the claim to a particular structure. In re Hutchison, 69

USPQ 138. See MPEP 2111.04.

Citation of Pertinent Prior Art

3.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Dove et al. (US Patent Number 6,175,865) automatic configuring media connections.

Berman et al. (US Patent Number 7,127,624) management of media pairs using MDIX.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mon Cheri S. Davenport whose telephone number is 571-270-

1803. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 5:00 p.m. EST.
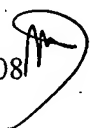
If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MD/md
January 20, 2008

Seema S. Rao   1/22/08
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